

In the Claims:

1 – 60 (Canceled).

61. (New) A method of generating a plant having a modified canopy size, comprising:

- (a) expressing streptavidin in cells of a young leaf and/or shoot tissue of a plurality of plants, said streptavidin including a signal peptide capable of self secretion, thereby depleting biotin in said cells of said young leaf and/or shoot tissue; and
- (b) selecting viable plants of said plurality of plants which exhibit degeneration of said young leaf and/or shoot tissue as compared to similar plants not expressing said streptavidin, thereby obtaining the plant having the modified canopy size.

62. (New) A method of generating a plant having a seedless fruit, comprising:

- (a) expressing streptavidin regulated under the transcriptional control of a root specific promoter in cells of an embryonic tissue of a plurality of plants, said streptavidin including a signal peptide capable of self secretion, thereby depleting biotin in said cells of said embryonic tissue; and
- (b) selecting viable plants of said plurality of plants which exhibit degeneration of said embryonic tissue as compared to similar plants not expressing said streptavidin, thereby obtaining the plant having the seedless fruit.

63. (New) The method of claim 62, wherein said root specific promoter is Tob promoter.

64. (New) A method of generating a plant having a seedless fruit, comprising:

- (a) expressing streptavidin in cells of an embryonic tissue of a plurality of plants, said streptavidin including a signal peptide capable of self secretion , thereby depleting biotin in said cells of said embryonic tissue; and
- (b) selecting viable plants of said plurality of plants which exhibit degeneration of said embryonic tissue as compared to similar plants not expressing said streptavidin, thereby obtaining the plant having the seedless fruit.

65. (New) The method of claim 64, wherein said expressing is regulated under the transcriptional control of a tissue specific promoter.

66. (New) The method of claim 64, wherein said expressing is regulated under the transcriptional control of a developmental stage specific promoter.